

# orto alresa

Centrifuges and laboratory products

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General applications: Centrifuges micro

## BIOCEN 22 R

# BIOCEN 22 R

LCD PCBS 



IVD CE

**Max. capacity:** 8 x 15 ml.

**Max. speed:** 31.865 xg / 18.100 RPM

One of the best options when high speed and different tube formats are required. This refrigerated microcentrifuge, which has a wide range of rotors for a cooled centrifuge, it can work with conical type tubes from 0,2 ml. to 15 ml. Dynamic cooling equipment kept the desired temperature, reaching it in a short period of time and maintaining it stable throughout the whole cycle, regardless of the operation speed. Customisation of equipment options through the software enables you to adapt the work cycles to the process as well as the user preferences, thus optimising performance in your laboratory.

For Ortoalresa, the Biocen 22 R centrifuge is the culmination of its know-how in centrifugation, materialised for the user in a robust, versatile and efficient piece of equipment that integrates perfectly into any lab, highlighting its application in research and biotechnology.

## Features

### LCD screen:

- Shows RPM and RCF, time, temperature and acceleration/deceleration (PCBS).
- Speed programming in 10 RPM/ 10 xg steps.
- Timer countdown/up from "0" or at "set RPM/ RCF" for reproducible tests.
- Timer from 1 to 99 min. programmable in 5 sec. steps and hold position.
- PCBS: Progressive controlled acceleration and braking system up to 175 selectable ramps that prevents sample homogenization after separation.
- 16 programmable memories.
- Several acoustic and visual messages warning the user the device situation.

## Easy to use

- Microprocessor controlled.
- Induction motor maintenance free (brushless).
- Rotors list on memory.
- Noise level: below 65 dB.
- Start, stop, open lid and short spin with adjustable speed buttons.
- Option of free/locked adjustment of RPM/ RCF along the run.
- Low height for easy access.
- Last values remain in memory.
- Automatic rotor recognition. Over-speed protection.

## Safety

- Lid provided with security systems:
  - Automatic lid lock system, motorized.
  - Emergency lid-lock release.
  - Locking and protection against opening along the run.
  - Lid dropping protection.
  - Port in the lid for calibration and operation checking.
- Unbalance detection and switch off.
- Protection safety ring between the centrifugation chamber and the housing.
- Chamber of centrifugation in stainless steel (easy cleaning).
- Rotors can be removed with the lid closed. Hermetic lids.
- Rotors and adapters autoclavable, easy to install by the user.
- Automatic disconnection for energy saving up to 8 h.

## Refrigeration

- Remains the refrigeration after centrifugation process.
- Precooling program with rotor spinning and temperature selectable.
- Guarantee 4 °C at maximum RPM.
- Temperature range from -20°C (-4°F) to 40°C (104°F) in 1°C steps.
- Temperature sensor inside the chamber.
- Gas R 449A HFO (CFC free).

**EU Directives:** 2011/65/EU, 2012/19/EU, 2014/30/EU, 2014/35/EU, 98/79/EC.

**Regulation n°:** (EC) 1005/2009, (EU) 517/2014.

**Standards:** EN 61010-1, EN 61010-2-101, EN 61010-2-020, EN 61326-2-6, EN 61326-1.





## Versions

	Dimensions (mm) (w x d x h)			Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Consumption (W)
CE 148	270	650	280	41	220-230	50-60	540
CE 149	270	650	280	41	110-120	60	700



## Accessories

### Centrifuge Biocen 22 R

		MICROTUBES							
		RT 224		RT 222		RT 252		RT 223	
									
ROTOR		ANGLE FIXED 45 °		ANGLE FIXED 45 °		ANGLE FIXED 45 °		ANGLE FIXED 30 °	
Max. capacity		32 x 0,2 ml		24x1,5-2 ml		12 x 5 ml		8x15 ml	
RPM Max.		18.100		18.100		18.100		8.000	
Radius (mm)		55		82		87		91	
RCF Max. (xg)		20.145		30.034		31.865		6.511	
Min. temp. at max. speed (°C)		-1		0		4		-3	
SAMPLE VOLUME	Dim (mm) approx.	ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS	
		Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.
15 ml.	ø16 x 100	-	-	-	-	-	-	8	-
15 ml. conical	ø17 x 122	-	-	-	-	-	-	8	-
10 ml.	ø13 x 100	-	-	-	-	-	-	8	RE 371
10 ml. blood sample	ø16 x 107	-	-	-	-	-	-	8	-
10 ml. (hs)	ø16 x 80	-	-	-	-	-	-	8	RE 398
7/10 ml. blood sample	ø13 x 107	-	-	-	-	-	-	8	RE 371
5 ml.	ø13 x 75	-	-	-	-	-	-	8	RE 377
5 ml. conical	ø17 x 60	-	-	-	-	12	-	-	-
5 ml. conical screw cap	ø17 x 68	-	-	-	-	6	-	-	-
5 ml. blood sample	ø13 x 82	-	-	-	-	-	-	8	RE 377
Microtubes 1,5 - 2 ml.	ø11 x 42	-	-	24	-	12	RE 506	8	RE 513
Microtubes 0,5 - 0,6 ml.	ø8 x 30	-	-	24	RE 305	12	RE 507	8	RE 514
Microtubes 0,2 - 0,4 ml.	ø6 x 45	32 x 0,2	-	24	RE 304	12	RE 508	8	RE 515
Cryotubes	ø12,5 x 52	-	-	-	-	12	RE 537	-	-

**orto**  
alresa  
About centrifugation

**Álvarez Redondo S.A.**  
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**Made in Spain (UE)**